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Fig. 1

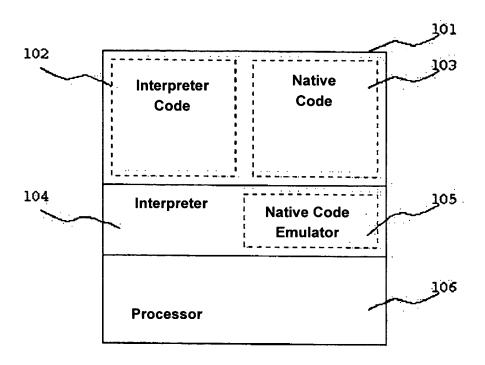
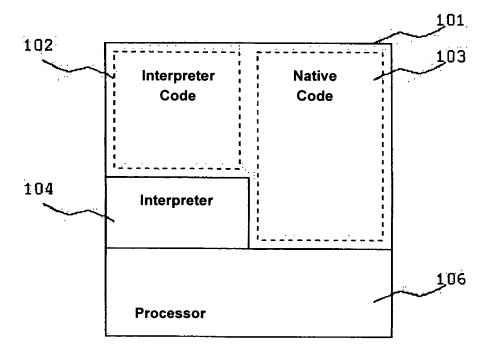
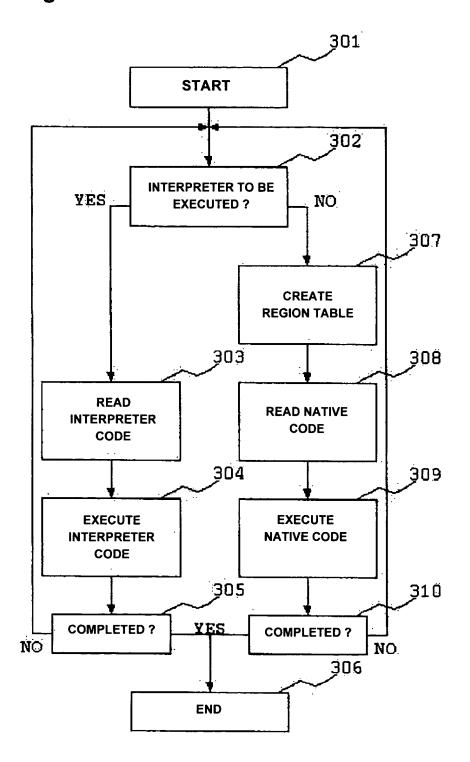


Fig. 2



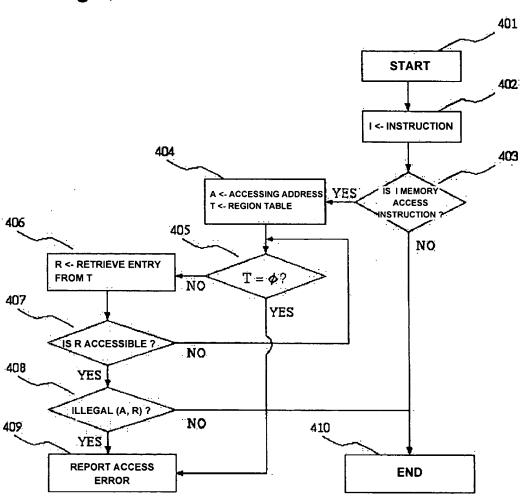
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Fig. 3



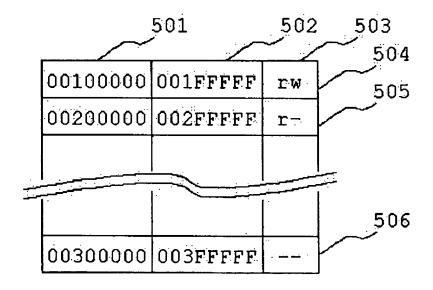
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Fig. 4



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Fig. 5



# Fig. 6 (a)

```
class C {
  static native void foo(Object obj);
  static void bar(Object obj) {
    foo(obj);
  }
}
(a) Java Code
```

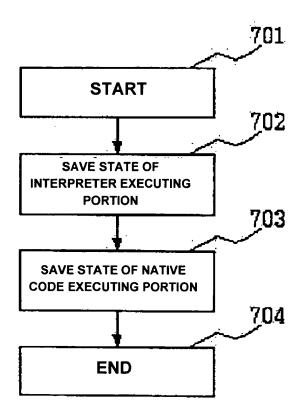
### Fig. 6 (b)

```
JNIEXPORT void JNICALL Java_C_foo(
   JNIEnv *env, jclass cls, jobject obj) {
   int *p = (int *)obj;
   *p = 0;
   // (1)
}
```

(b) Nativ Cod

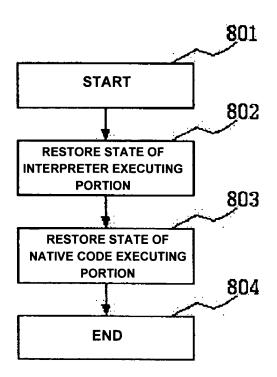
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Fig. 7



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Fig. 8



```
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```

## Fig. 9 (a)

```
class C {
  static native void foo();
  static void bar() {
    for(int j=0; j < 10; j++) {
      foo();
    }
}
(a) Java Code</pre>
```

## Fig. 9 (b)

```
JNIEXPORT jint JNICALL Java_C_foo(
   JNIEnv *env, jclass cls) {
   jint s = 0;
   for(int i = 0; i < 100; i++) {
      s = s + 1;
   }
   return(s);
}</pre>
```

#### (b) Native Code

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Fig. 10

### Interpreter

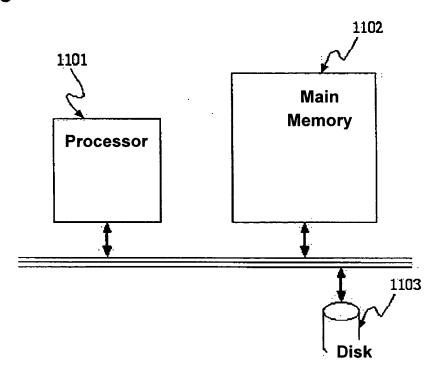
Variable	Value
j	3
PC	111.

#### **Native Code**

Variable	Value
i	10
S	45
PC	111

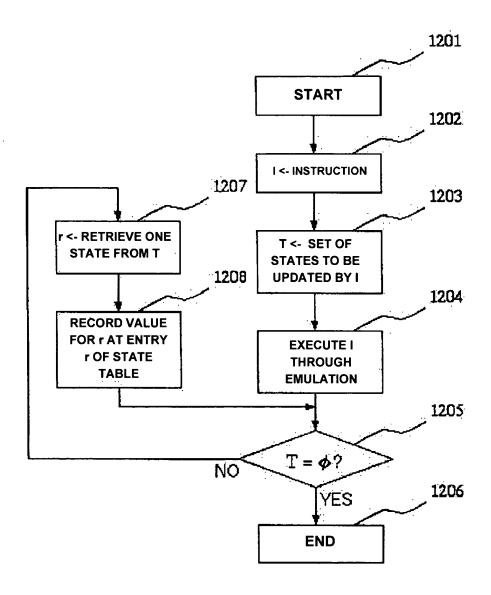
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Fig. 11



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Fig. 12



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Fig. 13

